UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,776	09/26/2001	Kevin Packingham	1731	1811

			EXAMINER
28005	7590	11/24/2004	SKED, MATTHEW J

SPRINT
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/963,776	PACKINGHAM, KEVIN
		Examiner	Art Unit
		Matthew J Sked	2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 September 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>9/26/01</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 17, 26 and 27 are objected to because of the following informalities: In

claim 17, on page 52, line 1 "histroy" should be changed to –history--. Claims 26 and

27 are dependent upon the voice command platform of claim 23, however claim 23 is a

method claim. For the purposes of prosecution it will be assumed that claims 26 and 27

are dependent upon claim 24.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 3 refers to "the navigation-recording logic" however

claim 1 does not mention a navigation-recording logic. For the purposes of prosecution

it will be assumed that claim 3 is dependent upon claim 2.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1, 2, 4, 12, 14-16 and 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Byrne et al. (U.S. Pat. Pub. 2004/0179659A1).

As per claim 1, Byrne teaches a voice command platform comprising:

a user communication interface for communicating with users via a telecommunications network (paragraph 38);

a processor (paragraph 42);

an application-processing module executable by the processor voice command applications, the voice command applications having navigation points (interaction path records a history of visited domains so this would inherently have navigation points for the interaction path to point to, paragraph 205), and the voice command applications (domains) defining user-prompts, allowed grammars and application logic, wherein the processor processes voice command applications during voice command sessions with users (domains each have their own vocabulary and commands associated with this vocabulary would have its own logic, paragraphs 73 and 77); and

a user profile store including a navigation history record respectively for each of a plurality of users, the navigation history record for a given user identifying navigation points of voice command applications that the processor has processed during at least one voice command session with the given user (separate user file created for each user and this profile includes a history of interaction that would inherently have identified navigation points to point to, paragraph 56).

5.   As per claim 2, Byrne teaches a navigation-recording logic executable by the

processor to record in the navigation history record for the given user an indication of a

navigation point of a voice command application that the processor has processed

during a voice command session with the user (the history of user interaction would

inherently have a recording logic to save navigation points in the history, paragraph 56)

6.   As per claim 4, Byrne teaches a session-restore logic executable by the

processor to restore a given voice command session with the given user based on the

navigation history record for the given user (after temporarily discontinuing interaction

with the system the system returns the user to the last domain visited, paragraph 98).

7.   As per claim 12, Byrne teaches an expert-mode-transition logic executable by the

processor to automatically transition the given user to expert-mode user status based

on the navigation history record for the given user (system distinguishes between an

expert and a novice user based upon the user interaction history, paragraph 69).

8.   As per claim 14, Byrne teaches the telecommunications network comprises a

wireless communication link (cellular or wireless, paragraph 38).

9.   As per claim 15, Byrne teaches a voice command platform of the type that

communicates with users via a telecommunications network (paragraph 38) and

executes voice command applications during voice command sessions with users, a

method comprising:

        storing, respectively for each of a plurality of users, a navigation history log

indicating navigation points of voice command applications that the platform has

executed during at least one voice command session with the user (user profile includes

a history of interaction that would inherently have identified navigation points to point to,

paragraph 56).

10.   As per claim 16, Byrne teaches using the navigation history log to restore a

previous voice command session with the user (after temporarily discontinuing

interaction with the system the system returns the user to the last domain visited,

paragraph 98).

11.   As per claim 20, Byrne teaches:

using the navigation history log to determine that the user should be

automatically transitioned to expert-mode user status (system distinguishes between an

expert and a novice user based upon the user interaction history, paragraph 69) ; and

automatically transitioning the user to expert-mode user status (changes

conversational style, menus and interface features according to determination,

paragraph 69).

12.   As per claim 21, Byrne teaches using the navigation history log to determine that

the user should be automatically transitioned to expert-mode user status comprises

using the navigation history log to determine that the user should be automatically

transitioned to expert-mode user status with respect to a given navigation point (adds

terms from a domain dictionary to the global vocabulary based upon the frequency the

user accesses this domain, paragraph 152); and

automatically transitioning the user to expert-mode user status comprises

automatically transitioning the user to expert-mode user status with respect to the given

navigation point (automatically adds terms to global vocabulary for the user, paragraph 152).

13.   As per claim 22, Byrne teaches using the navigation history log to determine that the user should be automatically transitioned to expert-mode user status comprises:

determining, based on the navigation history log, that a given navigation point has been accessed at least a threshold of times during at least one voice command session with the user (frequency of domains accessed is compared to a threshold to determine user level, paragraph 152); and

responsively determining that the user should be automatically transitioned to expert-mode user status with respect to at least the given navigation point (automatically adds terms to global vocabulary for the user, paragraph 152).

14.   As per claim 23, Byrne teaches the telecommunications network comprises a wireless communication link (cellular or wireless, paragraph 38).

15.   As per claim 24, Byrne teaches a voice command platform comprising:

a processor (paragraph 42);

stored indications, respective for each of a plurality of users (separate user profile per user, paragraph 56), of a use-level of the user and a navigation history of the user (system distinguishes a novice user form an expert user from the user interaction history hence it indicates the use-level, paragraph 69); and

logic executable by the processor to switch the use-level of a user from one level to another based on the navigation history of the user (automatically changes

conversational style, menus and interface features according to determination,

paragraph 69).

16.   As per claim 25, Byrne teaches:

the use-level is selected from the group consisting of (i) expert-mode and (ii) not-

expert mode (novice user and expert user, paragraph 69);

the logic is executable by the processor to automatically switch the use-level of

the user from non-expert mode to expert-mode, based on the navigation history of the

user (automatically changes conversational style, menus and interface features

according to determination, paragraph 69).

17.   As per claim 26, Byrne teaches the logic is further executable by the processor to

prompt the user for authority to switch the user's use-level (system asks permission

from user to adjust the conversational style, paragraph 203).

18.   As per claim 27, Byrne teaches a voice command application including expert-

logic and non-expert-mode logic, wherein the processor executes the expert-mode logic

when the voice command platform is interacting with a user for whom the user profile

store specifies an expert-mode use-level, and the processor executes the not-expert-

mode logic when the voice command platform is interacting with a user form whom the

user profile store specifies a not-expert-mode use-level (system has prompts and

menus for novice and expert users that changes based upon the user-level

determination, paragraph 69).

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

20.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne in

view of Raghunandan (U.S. Pat. Pub. 2002/0111994A1).

Byrne does not specifically teach or point out that the navigation-recording logic

is executable by the processor to record in the navigation history record for the given

user each navigation point accessed during the voice command session with the user.

Raghunandan teaches storing a user's data that includes a history of each

Internet site the user has visited (paragraph 37).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify the system of Byrne to record in the navigation history record for the

given user each navigation point accessed during the voice command session with the

user as taught by Raghunandan because it would give a more accurate navigation

history to save for future use.

21.   Claims 5-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Byrne in view of Pugliese III et al. (U.S. Pat. Pub. 2001/0044751).

As per claim 5, Byrne does not teach the session-restore logic is executable by

the processor to determine that a system disconnect occurred during the given voice

command session and to thereafter restore the given voice command session.

Pugliese teaches a voice commanded shopping session that saves a history of shopping events and uses this history to rebuild the user's session (paragraphs 79 and 80).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne to determine that a system disconnect occurred during the given voice command session and to thereafter restore the given voice command session as taught by Pugliese because it would avoid a loss of information and work the user had done, hence making the system more user-friendly.

22.   As per claim 6, Byrne teaches the session-restore logic further executable by the processor to prompt the user for consent to restore the given voice command session (after temporarily discontinuing interaction with the system the system asks the user if they want to return to the previous domain, paragraph 103).

23.   As per claim 7, Byrne does not teach the user profile store includes an indication for the given user indicating that the system disconnect occurred and the session-restore logic is executable by the processor to determine, based on the indication, that the system disconnect occurred.

Pugliese teaches the user profile store includes an indication for the given user indicating that the system disconnect occurred and the session-restore logic is executable by the processor to determine, based on the indication, that the system disconnect occurred (last session id and session status flag are used to determine if disconnect occurred in order to resume the last session, paragraph 224).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne so that the user profile store includes an indication for the given user indicating that the system disconnect occurred and the session-restore logic is executable by the processor to determine, based on the indication, that the system disconnect occurred as taught by Pugliese because it would alert the system to know that a disconnect occurred previously so that it may reinstitute the last session so the user does not lose any work.

24.   As per claim 8, Byrne does not teach using the navigation history record for the given user to identify a voice command application that the processor was processing at the time the system disconnect occurred and loading and executing the voice command application.

Pugliese teaches using the navigation history record for the given user to identify a voice command application (application may provide voice recognition, paragraph 8) that the processor was processing at the time the system disconnect occurred (paragraph 222) and loading and executing the voice command application (accesses the last session id which would specify the application and session status flag in the user's profile to load the last session, paragraph 224).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne to use the navigation history record for the given user to identify a voice command application that the processor was processing at the time the system disconnect occurred and loading and executing the voice command

application as taught by Pugliese because it would load the user's last application only when the user signs on hence preventing confusion for other users.

25.   As per claim 9, Byrne does not specifically teach or point out that the navigation history lists navigation points in order of navigation.

Pugliese teaches the navigation history lists navigation points in order of navigation (chronological history, paragraph 79).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne so that the navigation history lists navigation points in order of navigation as taught by Pugliese because it would make the navigation points easy to navigate through, hence facilitating its use by the user.

26.   As per claim 10, Byrne teaches to restore the given voice command session for an indefinite period after a break in the session, this would include 15 minutes (paragraph 98), but does not teach restoring the given voice command session after a system disconnect.

Pugliese teaches restoring a voice command application after a system disconnect has occurred (paragraph 222).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne to restore the given voice command session for a period of approximately 15 minutes after a system disconnect because it would allow the user's information to be recovered if a power outage occurred.

27.   As per claim 17, Byrne teaches loading the given voice command application from the given navigation point and executing the given voice command application

(returns to last domain visited so it would need to have saved the navigation point of the last domain to load it, paragraph 98).

However, Byrne does not teach determining that a system disconnect occurred from the previous voice command session and identifying, based on the navigation history log, a given navigation point of a given voice command application that the platform was executing at the time the system disconnect occurred.

Pugliese teaches determining that a system disconnect occurred from the previous voice command session and identifying, based on the navigation history log, a given navigation point of a given voice command application that the platform was executing at the time the system disconnect occurred (accesses the last session id which would specify the application and session status flag to determine if there was a disconnect in the user's profile to load the last session, paragraphs 222 and 224).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne to use the navigation history record for the given user to identify a voice command application that the processor was processing at the time the system disconnect occurred and loading and executing the voice command application as taught by Pugliese because it would load the user's last application only when the user signs on hence preventing confusion for other users.

28.   As per claim 18, Byrne teaches restoring the previous voice command session with the user at the initiation of a subsequent voice command session with the user (after the break the system will automatically restore the previous session, paragraph 98).

29.   As per claim 19, Byrne teaches prompting the user for consent to restore the

given voice command session (after temporarily discontinuing interaction with the

system the system asks the user if they want to return to the previous domain,

paragraph 103).

30.   Claims 11, 13 and 28-35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Byrne.

        As per claim 11, Byrne does not teach that each of a plurality of the voice

command applications are VXML applications, and each of a plurality of navigation

points are Universal Resource Indicators.

        However, the Examiner takes Official Notice that VXML applications that use

Universal Resource Indicators are common in the art. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of invention to modify the system of

Byrne so that each of a plurality of the voice command applications are VXML

applications, and each of a plurality of navigation points are Universal Resource

Indicators because it is an uncomplicated method to implement voice command

applications into a system.

31.   As per claim 13, Byrne teaches the expert-mode-transition logic is executable to

make a determination, based on the navigation history record for the given user, that

the given user has accessed a navigation point (domain) at least a threshold number of

times (frequency of domains accessed is compared to a threshold to determine a

frequent user or expert of a domain, paragraph 152), but does not teach to set an

expert-mode user flag in a profile record for the user, in response to the determination.

However, the Examiner takes Official Notice that saving a user-level in memory is common in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to set an expert-mode user flag in a profile record for the user, in response to the determination because it would save processing time by not having to calculate if the user is an expert at the beginning of every session.

32.   As per claim 28, Byrne teaches a voice browser system arranged to execute voice-tag applications and to interface between voice tag applications and users, a method comprising:

maintaining a navigation-history record that indicates a user's navigation history through at least one of the voice-tag applications via the voice browser system (history of interaction, paragraph 56);

automatically setting the use-mode record to indicate that the user is an expert-user of the at least one voice-tag application, based on the navigation-history record (system distinguishes a novice user form an expert user from the user interaction history, paragraph 69); and

when executing the at least one voice-tag application, interfacing with the user according to the user-mode record (changes conversational style, menus and interface features according to determination, paragraph 69).

Byrne does not teach automatically determining whether the user is an expert from a use-mode record of the at least one voice-tag application.

However, the Examiner takes Official Notice that saving a user-level in memory is common in the art. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of invention to set an expert-mode user flag in a profile record for the

user, in response to the determination because it would save processing time by not

having to calculate if the user is an expert at the beginning of every session.

33.   As per claim 29, Byrne teaches the at least one voice-tag application defines a

standard set of logic including a standard set of voice prompts and the at least one

voice-tag application defines an expert set of logic including an expert set of voice

prompts, and wherein interfacing with the given user according to the use-mode

comprises:

    making a determination that the use-mode record indicates that the user is an

expert-user of the at least one voice-tag application (system distinguishes a novice user

form an expert user from the user interaction history, paragraph 69); and

    responsive to the determination, executing the expert set of logic rather than the

standard set of logic record (changes conversational style, menus and interface

features according to determination, paragraph 69).

34.   As per claim 30, Byrne teaches the voice prompts of the expert set are shorter in

duration than voice prompts of the standard set (length of menu prompts adjust

according to the user-level, paragraph 154).

35.   As per claim 31, Byrne teaches the standard set of voice prompts includes a

voice prompt for a given menu item (VUI menus, paragraph 154), but does not teach

the expert set of voice prompts includes a tone prompt for the given menu item.

    However, the Examiner takes Official Notice that tone prompts are common in

interactive voice response systems. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of invention to modify the system of Byrne so that the expert set of voice prompts includes a tone prompt for the given menu item because tone prompts are shorter than voice prompts and so it would save time for the user if he already knows the voice prompts from the system.

36.   As per claim 32, Byrne teaches determining that the user has accessed the given menu item at least a threshold number of times, and responsively setting the use-mode to indicate that the user is an expert-user of the at least one voice-tag application (frequency of domains accessed is compared to a threshold to determine user level and changes conversational style, menus and interface features according to determination, paragraph 152).

37.   As per claim 33, Byrne teaches the at least one voice-tag application defines a standard prompt for a given menu item and an expert prompt for the given menu item, and wherein interfacing with the given user according to the use-mode record comprises:

    making a determination that the use-mode record indicates that the user is an expert-user of the at least one voice-tag application (system distinguishes a novice user form an expert user from the user interaction history, paragraph 69); and

    responsive to the determination, executing the expert set of logic rather than the standard set of logic record (changes conversational style, menus and interface features according to determination, paragraph 69).

38.   As per claim 34, Byrne teaches the voice prompts of the expert set are shorter in duration than voice prompts of the standard set (length of menu prompts adjust according to the user-level, paragraph 154).

39.   As per claim 35, Byrne teaches the standard set of voice prompts includes a voice prompt for a given menu item (VUI menus, paragraph 154), but does not teach the expert prompt is a tone prompt.

However, the Examiner takes Official Notice that tone prompts are common in interactive voice response systems. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Byrne so that the expert prompt is a tone prompt because tone prompts are shorter than voice prompts and so it would save time for the user if he already knows the voice prompts from the system.

Conclusion

40.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lanier et al. (U.S. Pat. RE37,431), Ishikawa et al. (U.S. Pat. Pub. 2002/0032561A1), Usitalo et al. (U.S. Pat. Pub. 2002/0099679A1) and Robotham et al. (U.S. Pat. Pub. 2002/0015042) teach voice navigation systems that have navigation histories.
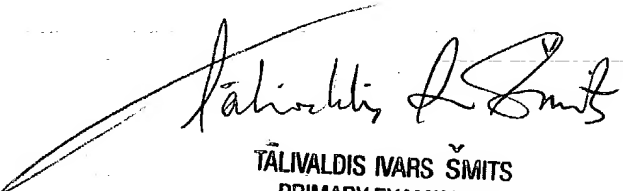
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Sked whose telephone number is (703) 305-8663. The examiner can normally be reached on Mon-Fri (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (703) 306-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TALIVALDIS IVARS SMITS
PRIMARY EXAMINER